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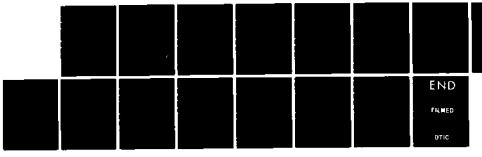

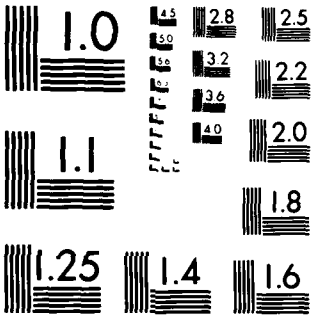

THE NAVY MENTAL HEALTH INFORMATION SYSTEM (NAMHIS): A FUNCTIONAL DESCRIPTION

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REPORT NO. 83-38

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NAVAL MEDICAL RESEARCH AND DEVELOPMENT COMMAND
BETHESDA, MARYLAND

The Navy Mental Health Information System (NAMHIS): A Functional Description

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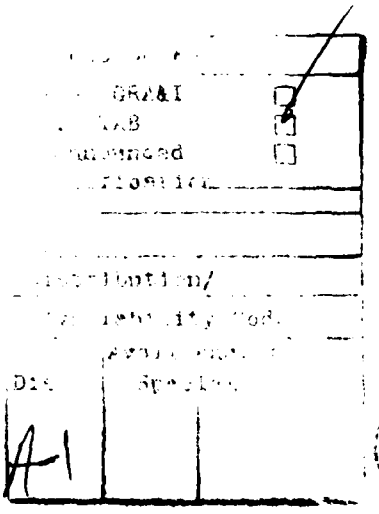

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SUMMARY

A comprehensive, automated Navy Mental Health Information System (NAMHIS) has been developed at the Naval Health Research Center for use in Navy outpatient mental health clinics. NAMHIS provides three major services. First, it is a medical recordkeeping system. Standardized clinical and administrative information from individual patient/clinician encounters are collected and stored in an automated medical record format. Easy access to these records is facilitated and timely reports of patient/clinician consultations are generated. Second, it serves as a management information system with monthly administrative reports and a readily available database to answer management related queries, and third, it provides a scientific database to support research queries and major investigative projects.

Two standard software systems drive the automation of NAMHIS. The first, called Batch NAMHIS, uses software written in the Statistical Analysis System (SAS) language and operates in batch mode. The second system, Interactive NAMHIS, uses the interactive Computer Stored Ambulatory Record (COSTAR) software, written in MUMPS language, as the vehicle of automation. Although both systems automate the basic functions of NAMHIS, they have somewhat different capabilities and differ in their inherent personnel and finanical resource requirements. In general, Interactive NAMHIS will perform more functions, but Batch NAMHIS requires fewer resources to operate.

The development of NAMHIS occurred in four phases:

1. Information needs assessment and systems analysis of representative Navy outpatient mental health clinics.
2. System design and software specifications generation.
3. System automation through parallel software development.
   a. Batch NAMHIS
   b. Interactive NAMHIS
4. Prototype system implementation at San Diego Region Mental Health Clinics.

Phase five will involve testing and evaluation of the two prototype systems. It is anticipated that interactive NAMHIS will be recommended for further distribution. However, because it is easier to install and less expensive to operate, Batch NAMHIS may have a role as a transitional system during the implementation of Interactive NAMHIS, or as an alternate system in smaller clinics with more limited resources.

Introduction

A comprehensive, automated Navy Mental Health Information System (NAMHIS) has been developed at the Naval Health Research Center, San Diego. NAMHIS was designed to perform the following functions:

1. Collect outpatient information from individual patient/clinician (mental health) encounters and store it in an automated medical record format.

2. Facilitate easy access to these records.

3. Standardize the collection of essential patient data.

4. Produce timely reports of patient/clinician consultations.

5. Serve as a mental health management information system by automatically providing administrators and managing clinicians with pertinent monthly statistics and by enabling easy access to management-related data.

6. Provide a scientific database to support major investigative projects and to answer research queries in a fast, efficient manner.

Two independent software systems, each designed to drive the automation of NAMHIS, were developed in parallel. The first uses software written in the Statistical Analysis System (SAS) language and operates in batch mode. This system, called Batch NAMHIS, is in place as a prototype system at three San Diego Region outpatient mental health clinics [Fleet Mental Health Support Units (FMHSU's)]. The second system uses the interactive Computer Stored Ambulatory Record (COSTAR) software, written in MUMPS language, as the vehicle of automation. The 'Interactive NAMHIS' prototype system has now been installed at one FMHSU in the San Diego region. As might be expected, the two software systems have somewhat different capabilities. However, both automate the basic functions of NAMHIS. Consequently, their net capabilities are much the same, even though their methods of operation are different.

This paper is a functional description of the Navy Mental Health Information System and its two available systems of automation. An historical perspective of the NAMHIS project will be provided. Additionally, the two software systems will be compared and contrasted to demonstrate the capabilities of each one.

Background

The project began with two pilot studies investigating Fleet Mental Health Support Units in the San Diego region. The first analyzed reporting requirements and documented the need for a standardized Navy outpatient mental health reporting system.[1] The second study involved the design and pilot testing of a prototype recordkeeping system at a single Fleet Mental Health Support Unit.[2] Data collection instruments developed for the recordkeeping system were utilized over a nine-month period. Based on the data collected and the results of the pilot study, the forms were revised and used to collect data at all four FMHSU's in the San Diego region over a 10-month period. A subsequent study analyzed these data to compare patient characteristics, diagnostic patterns, referral sources, and dispositions among the four FMHSU's.[3]

At this point in the project it was decided to formalize and expand the outpatient mental health reporting system, and to then automate it to form the Navy Mental Health Information System

(NAMHIS). The pilot studies had provided a great deal of information on the workings of the Navy outpatient mental health system. However, a more detailed understanding of this system was a necessary basis for the development of the comprehensive NAMHIS. Consequently, a systems analysis of the four San Diego region FMHSU's was performed. Medical recordkeeping requirements, quality assurance guidelines, local and remote reporting requirements, and the flow of information using these data elements were investigated in great detail through consultation with clinicians, technicians, administrators, and local management information specialists. It was learned that the content of the patient information collected and the procedures used to record, process, and report this information were somewhat different for each clinic. Quality assurance guidelines were in the process of formulation and standardization but were not as yet fully implemented in the region. Consequently, the resulting strategy for the development of NAMHIS was to provide a system which would standardize procedures as much as possible and facilitate the early implementation of quality assurance guidelines. At the same time, the necessary flexibility would be retained to accommodate the variability noted in patient populations and presenting problems from clinic to clinic.

Phase one of the NAMHIS project, needs assessment and systems analysis, was now complete. The next step was to design the NAMHIS and to generate specifications for software development. Data collection forms and an efficient system utilizing these instruments in data collection had to be developed, along with standardized reports of individual patient/clinician consultations and summary statistical reports involving the entire clinic population. Thus, phase two was system design and specifications generation.

NAMHIS Data Collection

Based on the knowledge acquired through the pilot studies and the systems analysis, the data collection forms were once again revised. Non-critical items were deleted, a few critical items were added, and others were modified. Item modifications typically consisted of rewriting the question, adding response choices, or redefining overlapping response choices within an item. The results of these revisions were three forms--the Patient Registration Form (Appendix 1), the Initial Encounter Form (Appendix 2), and the Follow-up Encounter Form (Appendix 3).

The Patient Registration Form contains basic demographic and identifying information such as name, sex, ethnic background, and marital status. During the initial visit, each new patient completes this form with assistance from the clinic technician (corpsperson, psychology technician, or civilian clerk). This information introduces the patient into the NAMHIS database. The Initial Encounter Form is used to collect data from initial patient/clinician consultations. It contains items such as type of principal service provided, date consult received or appointment requested, referral source, precipitating factors, DSM-III diagnosis,[4] disposition, and recommendations. The form is divided into two sections, the Technician Section and the Clinician Section. Items in the Technician Section are those not requiring a high level of clinical expertise to complete. This leaves the clinician (psychiatrist or psychologist) to address only those items necessitating the use of trained clinical judgment (e.g., diagnosis, disposition). With the patient himself completing the Registration Form, the responsibility for data collection is

divided three ways. This efficient procedure maximizes the 'labor resources' available to the clinic. Compliance and acceptance of the system at the four San Diego Region FMHSU's have been quite good.

The Follow-up Encounter Form is used to collect encounter data from follow-up visits. It contains a subset of the items in the Initial Encounter Form. Some data elements (e.g., precipitating factors) need only be collected during the first visit, and never again. Consequently, these items do not appear on the Follow-up Encounter Form.

Clinical and Management Information Reports

Part of the data retrieval function of NAMHIS is the automatic generation of reports. Batch NAMHIS and Interactive NAMHIS differ in their report generating capabilities. Once a patient's data have been entered into the system, Interactive NAMHIS can quickly generate a 'Report of Consultation' (Fig. 1). Due to the nature of the system, Batch NAMHIS will not produce this report. The Report of Consultation serves at least two purposes: 1) it provides 'hard copy' documentation of the patient's visit for clinic files and for the patient's medical record, and 2) it serves as a report to the referral source by presenting an essential distillation of the mental health consultation. This eliminates the need for clinicians to write out the report by hand. The standardized report and the concomitant data entry process insure that a core of critical data are presented and that the clinical evaluations necessary to arrive at that information were performed. Thus, adherence to quality assurance guidelines is virtually automatic. At the same time the flexibility needed to accommodate individual patient characteristics and circumstances is built into the report by allowing the insertion of textual comments at several locations. Of course, comments are stored in the database along with the rest of the data.

Although existing statistical reporting requirements were found to be minimal, it was concluded that the availability of certain management data would aid clinic managers in the administrative process. Information concerning each clinic's patient population characteristics (e.g., demographics, presenting problems, treatment needs) would be helpful in deciding policy, selecting personnel, and designing treatment programs. Therefore, existing reporting requirements were met, and additional management information capabilities were developed to operate on Batch NAMHIS and interactive NAMHIS (Monthly Outpatient Morbidity Report, Monthly Quality Assurance Report, and Monthly Managerial Report). Descriptions of these reports appear in an earlier paper.[5]

Once the NAMHIS was designed, data storage, transfer and retrieval were automated under two independent software systems, Batch NAMHIS and Interactive NAMHIS. The Batch NAMHIS software was designed to operate in a batch mode on existing hardware facilities at the Naval Health Research Center. Software development was relatively fast and inexpensive, and the system required that clinic staff be only minimally trained. Consequently, Batch NAMHIS was implemented in the four San Diego Region FMHSU's while the Interactive NAMHIS software was still being developed. When the software became available, Interactive NAMHIS replaced Batch NAMHIS in one of the FMHSU's. In this clinic Batch NAMHIS served as a transitional system. By the time Interactive NAMHIS was

MENTAL HEALTH CARE

REPORT OF CONSULTATION

NAVY MENTAL HEALTH INFORMATION SYSTEM (NAMHIS)

NAVAL HEALTH RESEARCH CENTER

SAN DIEGO

NAME: SSN: __ __ __-__ __-__ __ __ __

DATE OF CONSULTATION: __ __/__ __/__ __ SEX: AGE:

PATIENT STATUS: BRANCH OF SERVICE:

ENLISTED RATING OR OFFICER CATEGORY:

PAYGRADE: DUTY STATION:

LENGTH OF SERVICE: YEARS MONTHS

ETHNIC BACKGROUND:

MARITAL STATUS:

REFERRED BY:

DATE CONSULT RECEIVED OR APPOINTMENT REQUESTED: __ __/__ __/__ __

VISIT CLASSIFICATION:

SERVICE RECORD REVIEWED:

HEALTH RECORD REVIEWED:

CONSULT FORM REVIEWED:

MENTAL STATUS EXAMINATION PERFORMED:

PATIENT HISTORY TAKEN:

PRECIPITATING FACTOR(S):

PRINCIPAL SERVICE PROVIDED:

SPECIAL PROGRAM SCREENING:

DIAGNOSIS:

DISPOSITION:

RECOMMENDATIONS:

SPECIAL PROGRAM SCREENING RESULTS:

COMMENTS: _____

_____

_____

_____

_____

FACILITY:
CLINICIAN # _____ __ __/__ __/__ __
SIGNATURE DATE

CLINICIAN #2: _____ __ __/__ __/__ __
SIGNATURE DATE

DO NOT REMOVE FROM HEALTH RECORD

Figure 1. NAMHIS Report of Consultation.

implemented, the clinic staff were familiar with the data collection system and had established clinic procedures incorporating the NAMHIS. Although Interactive NAMHIS generally has greater software capabilities, Batch NAMHIS will be examined as an alternative system, perhaps in smaller clinics with more limited resources.

Batch NAMHIS - Functional Aspects

Batch NAMHIS, like Interactive NAMHIS, provides three major services. First, it is a medical (mental health) recordkeeping system; second, it serves as a management information system with monthly administrative reports and a readily available database to answer management-related queries, and third, it provides a scientific database to support research queries and major investigative projects. Figure 2 illustrates this multiple role in a three-month timeline describing the functions of Batch NAMHIS. In reference to this diagram, all patient data collected in March are entered into the computer during the first few days of April (Production Period 03). The data are

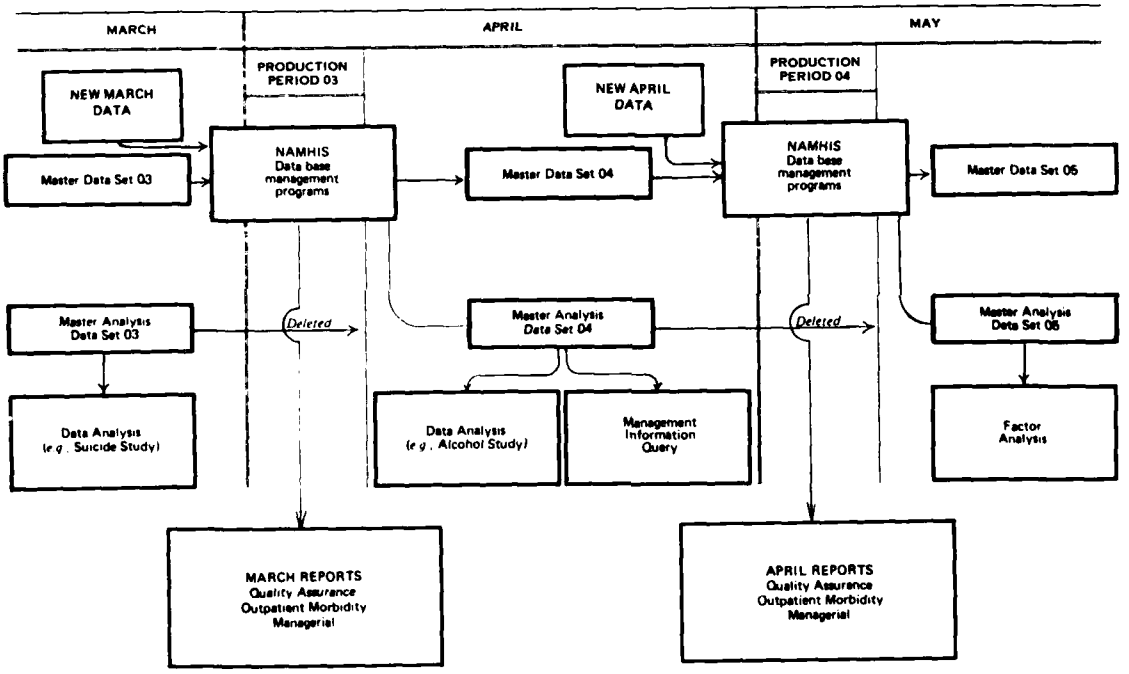

Figure 2 Timeline schematic of batch NAMHIS over a three-month period

edited and merged with the existing database (Master Data Set 03) via the Batch NAMHIS database management programs. The data are further edited and manipulated to produce the new Master Data

Set 04 and the new Master Analysis Data Set 04. Additional programs generate the March statistical reports for each clinic. During Production Period 04 in May, new April data are combined with Master Data Set 04 to produce Master Data Set 05, Master Analysis Data Set 05, and a new set of monthly statistical reports. Master Analysis Data Set 04 is then deleted, having been replaced by the updated version. Thus, the pattern repeats itself monthly. Production is complete and the reports are available to the FMHSU's by the fifth working day of each month. Any data analysis or information query is accomplished by accessing the most recent update of the Master Analysis Data Set.

Batch NAMHIS - The Process

The Batch NAMHIS database management programs are written in the Statistical Analysis System (SAS) programming language. This software package was selected because it could be tailored to manage variable length records while providing for easy access and analysis of the data. The SAS programs are submitted for batch execution in a pre-defined order, the output from one program serving as the input for the next, until the final products are obtained. Figure 3 illustrates this step-by-step process. Data, which are contained in data sets, are symbolized by circles. Programs and other processes which act upon the data are indicated by rectangles, and final products are represented by hexagons.

Because the Batch NAMHIS database management programs are written in SAS, Batch NAMHIS can be run on any computer that supports the Statistical Analysis System software. Batch NAMHIS was developed and initially operated on an IBM 3081. A year later the database and the software are being transferred to a VAX 11-780 computer where it is expected to run smoothly.

The clinic staffs at the FMHSU's that use Batch NAMHIS have no direct contact with the host computer. A courier collects the completed data forms from the FMHSU's each week and delivers them to the Naval Health Research Center. There they are manually screened for any obvious errors or omissions and given to data entry clerks for input. At the end of each month the new data are processed during the production period (Fig. 2). The monthly management information reports are generated for each clinic and distributed via courier. Any database queries or analyses are done by the staff at NHRC. Therefore, clinical staffs do not have direct access to the data; they must work through the NHRC staff to extract the information they need. A report of consultation could be generated, but for a recent encounter it could take as long as a month to derive it since new data are merged into the database on a monthly basis. By then the need for a specific clinical report will have disappeared. Thus, while Batch NAMHIS stores medical records, quick access to these records by clinical staff to derive, for example, a summary of a patient's previous visits or a single report of consultation is not practical. However, summary statistical reports involving all or part of the clinic population (e.g., utilization summaries, research analyses) are quickly generated using the powerful capabilities of the Statistical Analysis System.

Implementation of Batch NAMHIS at an FMHSU is relatively simple. Clinical staff need only be trained in data collection procedures; data entry and retrieval are handled elsewhere. Good communication between NAMHIS system managers and clinical staff is essential. An efficient, confidential courier system is equally important.

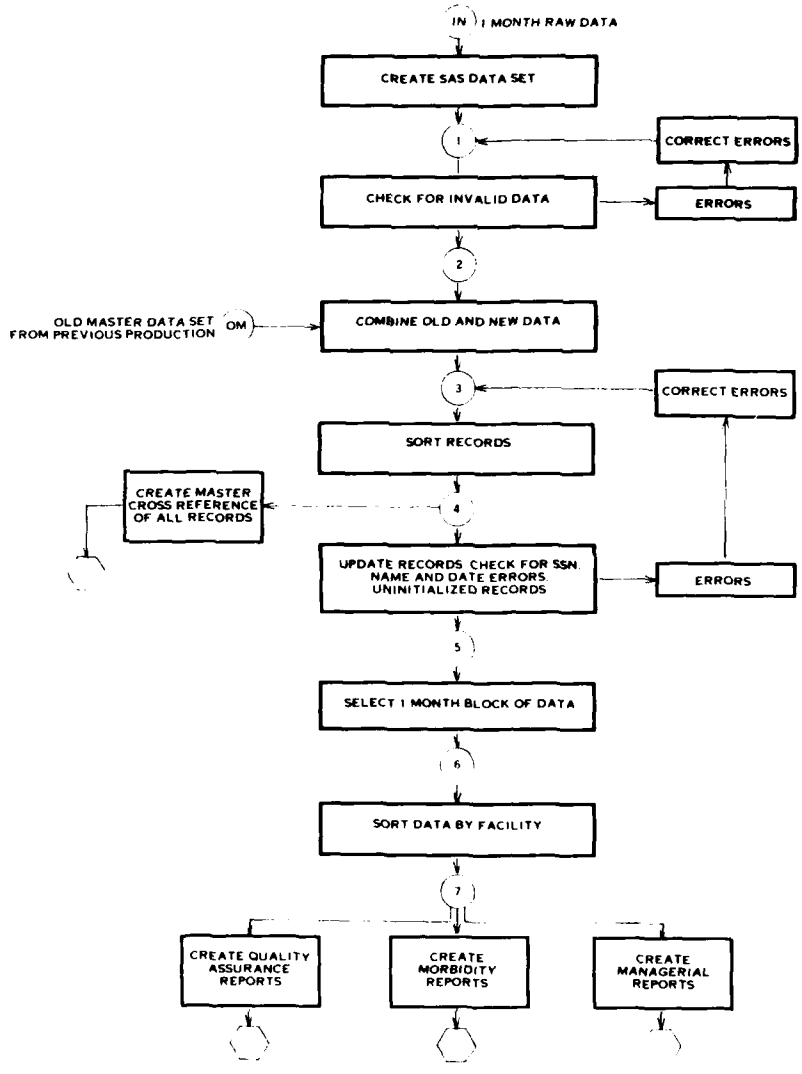

Figure 3. Flowchart of batch NAMHIS data base management programs.

Interactive NAMHIS

The foundation of the Interactive NAMHIS software is the Computer Stored Ambulatory Record (COSTAR)[a] package. COSTAR is an on-line, interactive software system designed to be modified for each new clinical application. Once modified, data entry, storage and retrieval are largely accomplished by medical staff working in the ambulatory medical facility. Naturally, some

[a]COSTAR is a trademark and is owned by the Massachusetts General Hospital.

training is required to teach medical staff how to operate the system. To the best of the authors' knowledge, Interactive NAMHIS is the first application of COSTAR to a mental health setting. Consequently, extensive modification was necessary. In addition, there were a few NAMHIS functions that COSTAR was unable to perform. These were primarily in the area of management information report generation. Because COSTAR is written in MUMPS, special MUMPS programs were developed and linked to the COSTAR software to accommodate these functional needs.

The data collection forms and procedures used with Interactive NAMHIS are essentially the same as those used with Batch NAMHIS. The uniqueness of Interactive NAMHIS begins with the data entry process. At the end of a patient/clinician consultation when the data forms are complete, they are given to the clinic staff member responsible for data entry (usually a clerk typist or receptionist). If the visit was an initial consultation, the data entry clerk enters the data from the Patient Registration Form to permanently register the patient in the Interactive NAMHIS database. The Initial Encounter Form data are entered next. Finally, the Report of Consultation is generated and automatically printed. Additional copies may be produced at this time, or at a later date if the need arises. The clinician responsible reviews the report, and when it is determined to be complete and accurate, he signs it and attaches it to the patient's consultation request form (SF 513). If the patient is still present, the report goes into his medical record. Otherwise, it is sent to the referral source (usually the patient's command). A Report of Consultation may be generated for any follow-up visit as well.

Interactive NAMHIS can produce a Patient Summary encapsulating a patient's record from his initial visit to his most recent follow-up encounter. Clinicians find the summary quite useful when reviewing a patient's record in preparation for a follow-up consultation. Clinic staff may choose to print Patient Summaries each morning for all patients scheduled for follow-up visits that day.

The generation of the management information reports is triggered by the clinic staff at the end of each month. Thus, the reports are immediately available to clinic managers for required morbidity reporting and for general review. Additionally, Interactive NAMHIS has a report generator module allowing managers to produce tailor-made reports, presumably containing information not listed in the standardized management information reports. Some training and practice presuppose the effective use of this module.

Besides the basic NAMHIS functions already outlined, two additional modules were developed to operate as part of Interactive NAMHIS. They are the Mental Status Examination Module and the Patient History Module. The Mental Status Examination (MSE) was adapted from a version employed in another automated information system.[6] It contains 186 items divided into 13 categories (e.g., content of thought, interview behavior, general appearance). After the consultation, the clinician rates the patient's condition in each of the categories. For those categories where the patient is not rated as 'Normal,' the clinician further documents the patient's condition by rating items making up the categories. With some practice a clinician can fill out this comprehensive examination in 3-4 minutes. Upon completing it, the clinician gives the form to the data entry clerk who enters the data and generates a Mental Status Report. According to existing

quality assurance guidelines, a mental status examination is required on all patients during their initial consultations. Consequently, the Mental Status Report is attached to the Report of Consultation. The NAMHIS Mental Status Exam and Report are further described in another paper.[7]

The Patient History Form is used to gather historical information pertinent to the clinical process. This information helps document the basis for clinical decisions regarding diagnosis, disposition, and treatment. The procedures for filling out the Patient History Form, entering the data, and generating a report are the same as those for the MSE. Similarly, the Patient History Report is attached to the Report of Consultation. A paper describing the Patient History Module is forthcoming.

During the prototype testing phase, Interactive NAMHIS will continue to operate on the VAX 11-780 computer at the Naval Health Research Center. The prototype testing site, (Naval Station Mental Health Clinic, San Diego), is linked to the VAX via a dedicated phone line and two Micon 8000 multiplexers. Hardware operating at the remote site are a Televideo 950 CRT and an LA 120 printing terminal. This configuration allows for expansion in the clinic to include additional CRT's and printers, if needed. The existing hardware are considered the minimum necessary to operate Interactive NAMHIS. The required capacity of the central computer depends on the size of the clinic population.

Summary

The development of NAMHIS occurred in four phases:

1. Needs assessment and systems analysis
2. System design and specifications generation
3. System automation through parallel software development
   a. Batch NAMHIS
   b. Interactive NAMHIS
4. Prototype system implementation at San Diego Region FMHSU's.

Phase five will involve testing and evaluation of the two prototype systems. It is anticipated that Interactive NAMHIS will be recommended for further distribution. Although Batch NAMHIS has fewer capabilities, it is easier to install and less expensive to operate than Interactive NAMHIS. Consequently, it may have a role as a transitional system during the implementation of Interactive NAMHIS, or as an alternate system in smaller clinics with more limited resources.

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MENTAL HEALTH CARE

PATIENT REGISTRATION FORM

THIS FORM TO BE COMPLETED BY THE PATIENT. RESPOND TO ALL ITEMS. PLEASE PRINT.

1. PATIENT NAME

LAST NAME _____ FIRST NAME _____ M.I. _____

2. SEX

☐ (M) Male ☐ (F) Female

3. DATE OF BIRTH

MONTH ____ / DAY ____ / YEAR ____

4. DUTY STATION *If DEPENDENT or CIVILIAN, print home address*

_____

CITY _____ STATE _____ ZIP CODE _____

5. SOCIAL SECURITY NUMBER (SSN)

___ ___ ___ - ___ ___ - ___ ___ ___ ___

SSN SUFFIX (Office use) ___ ___

6. TODAY'S DATE *(Date of Registration)*

MONTH ____ / DAY ____ / YEAR ____

7. ETHNIC BACKGROUND

☐ (W) White
☐ (OR) Oriental
☐ (H) Hispanic
☐ (B) Black
☐ (F) Filipino or Malayan
☐ (N) Native American
☐ (OT) Other

8. MARITAL STATUS

☐ (N) Never married
☐ (M F) Married first time
☐ (M O) Married other than first
☐ (S) Separated
☐ (D) Divorced
☐ (W) Widowed

9. PATIENT STATUS

☐ (A) Active duty
☐ (D S) Dependent spouse
☐ (D C) Dependent child
☐ (R) Retired
☐ (O) Other

10. BRANCH OF SERVICE

☐ (USN) USN or USNR
☐ (USM) USMC
☐ (USC) USCG
☐ (O) Other/Does not apply

11. PAYGRADE OR RANK *Check appropriate box*

If *Dependent*, check here ☐ (D) If *Nondependent Civilian*, check here ☐ (CI)

☐ E1 ☐ E2 ☐ E3 ☐ E4 ☐ E5 ☐ E6 ☐ E7 ☐ E8 ☐ E9
☐ W1 ☐ CW2 ☐ CW3 ☐ CW4
☐ O1 ☐ O2 ☐ O3 ☐ O4 ☐ O5 ☐ O6 ☐ O7 ☐ O8 ☐ O9 ☐ O10

12. DATE FIRST CAME ON ACTIVE DUTY *Ignore if Dependent or Civilian.*

MONTH ____ / DAY ____ / YEAR ____

13. IN RECRUIT TRAINING? *Ignore if Dependent or Civilian.*

☐ (Y) Yes ☐ (N) No

14. ENLISTED RATING OR OFFICER CATEGORY *Enter one from chart with assistance from staff. Ignore if Dependent or Civilian.*

_____

NHRC 6320-30 1A (01-84)

APPENDIX 2

MENTAL HEALTH CARE

INITIAL ENCOUNTER FORM

THIS SECTION TO BE COMPLETED BY THE TECHNICIAN. ANSWER EACH ITEM. PLEASE PRINT.

PATIENT NAME

LAST NAME _____ FIRST NAME _____ M. I. _____

SEX	DATE OF BIRTH	DATE OF ENCOUNTER
☐ (M) Male ☐ (F) Female	___ ___ / ___ ___ / ___ ___ (MONTH / DAY / YEAR)	___ ___ / ___ ___ / ___ ___ (MONTH / DAY / YEAR)

CLINICIAN No. 1	CLINICIAN No. 2
CODE: ___ ___ ___	CODE: ___ ___ ___

SITE CODE *Check only one.*

- ☐ (A) NAS North Island
- ☐ (B) Naval Station San Diego
- ☐ (C) Naval Training Center San Diego
- ☐ (D) NAS Miramar
- ☐ (E) San Diego Naval Hospital
- ☐ (O) Other

TYPE OF PRINCIPAL SERVICE PROVIDED *(Evaluation/Psychotherapy) Check only one.*

- ☐ (A) Suitability or fitness for duty
- ☐ (B) Special program screening
- ☐ (C) Psychometric testing
- ☐ (D) Fit for confinement
- ☐ (E) Medical Board
- ☐ (F) Sanity hearing
- ☐ (G) NAB or RAB
- ☐ (H) Individual therapy
- ☐ (I) Group therapy
- ☐ (J) Couple/family therapy
- ☐ (K) Relaxation therapy
- ☐ (L) Other screening
- ☐ (O) Other

VISIT CLASSIFICATION

- ☐ (1) Routine initial visit
- ☐ (2) 72 hr. initial visit
- ☐ (3) Emergency initial visit (clinical)
- ☐ (4) Emergency initial visit (admin.)

1. DATE CONSULT RECEIVED OR APPOINTMENT REQUESTED (DCR*)

___ ___ / ___ ___ / ___ ___ (MONTH / DAY / YEAR)

2. WHO REFERRED PATIENT TO PSYCH? *Check only one.* (RF-)

- ☐ (A) Dispensary sick call
- ☐ (B) Other medical service/Hospital
- ☐ (C) Command/Command sick call
- ☐ (D) Brig/Brig sick call
- ☐ (E) Chaplain
- ☐ (F) Self
- ☐ (G) Legal Officer
- ☐ (O*) Other: _____

3. SPECIAL PROGRAM SCREENING *Check only one.* (SPS-)

- ☐ (A) None
- ☐ (B) Submarine duty
- ☐ (C) UDT, SEAL or Diving
- ☐ (D) PRP
- ☐ (E) Deepfreeze
- ☐ (F) Company Commander or Drill Instructor
- ☐ (O*) Other _____

NHRC 6320-30.18 [05-84]

THIS SECTION TO BE COMPLETED BY THE CLINICIAN. PLEASE RESPOND TO ALL ITEMS.

4. PRECIPITATING PROBLEMS AND SYMPTOMS *Rate patient on applicable items by circling the appropriate number: 1 = Mild, 2 = Moderate, 3 = Severe. If a problem or symptom is of Short Duration, write* **S** *to the left of the letter code corresponding to the item.*

DPR	– 1 2 3 Depression	LN	– 1 2 3 Loneliness
AXY	– 1 2 3 Anxiety	SCID	– 1 2 3 Suicide Ideation
DLP	– 1 2 3 Disciplinary/Legal Problem	SGES	– 1 2 3 Suicide Gesture
ALCA	– 1 2 3 Alcohol Abuse	SCAT	– 1 2 3 Suicide Attempt
DGB	– 1 2 3 Drug Abuse	HCID	– 1 2 3 Homidical Ideation
ETD	– 1 2 3 Eating Disorder	HBR	– 1 2 3 Homicidal Behavior
SLD	– 1 2 3 Sleep Disorder	MDN	– 1 2 3 Moodiness
SXP	– 1 2 3 Sexual Problem	NRV	– 1 2 3 Nervousness
MFP	– 1 2 3 Marital/Family Problem	TMP	– 1 2 3 Temper Outbursts
IPM	– 1 2 3 Interpersonal Problem	EXW	– 1 2 3 Excess Worry
PNL	– 1 2 3 Problem with Navy Life	CSP	– 1 2 3 Crying Spells
JP	– 1 2 3 Job Problem	LSE	– 1 2 3 Loss of Energy/Interest
WD	– 1 2 3 Wants Discharge	SLP	– 1 2 3 Sleep Impairment
BB	– 1 2 3 Bizarre Behavior	APT	– 1 2 3 Appetite Impairment
SCP	– 1 2 3 Somatic Complaint	PPO*	– 1 2 3 Other: _____
HSK	– 1 2 3 Homesickness	NPL	Non Applicable

CODE: COMMENTS: _____

CODE: COMMENTS: _____

CODE: COMMENTS: _____

5. SERVICE RECORD REVIEWED? (SRR-)

☐ (Y) Yes ☐ (N) No ☐ (L) Lost or not accessible

6. HEALTH RECORD REVIEWED? (HRR-)

☐ (Y) Yes ☐ (N) No ☐ (L) Lost or not accessible

7. CONSULT FORM REVIEWED? (CFR-)

☐ (Y) Yes ☐ (N) No ☐ (L) Lost or not accessible

8. PRIMARY DIAGNOSIS

AXIS 1 - ___ ___ ___ . ___ ___ * AXIS 2 - ___ ___ ___ . ___ ___ *

CODE: COMMENTS: _____

CODE: COMMENTS: _____

9 DISPOSITION *Check only one.* (DSP-)

☐ (Q) Fit for full duty ☐ (S) Unfit for duty ☐ (U) Deferred

☐ (R) Unsuitable ☐ (T) Limited duty ☐ (V) Dependent - does not apply

COMMENTS: _____

10 RECOMMENDATION *Check ALL that apply.*

ALCR	☐ Alcohol rehabilitation	CHM	☐ CHAMPUS
DRGR	☐ Drug rehabilitation	ADSEP	☐ Administrative separation
CAAC	☐ CAAC	MB	☐ Medical Board
HSP	☐ Admit to hospital	FSC	☐ Family Service Center
OTX	☐ Return for outpatient treatment	NFU	☐ No follow-up indicated
FEVL	☐ Return for further evaluation	RCO*	☐ Other: _____

CODE COMMENTS: _____

CODE COMMENTS: _____

11 SPECIAL PROGRAM SCREENING RESULTS *Check one only.* (SPSR-)

☐ (A) Qualified ☐ (C) Deferred

☐ (B) Disqualified ☐ (D) Does not apply

BRIEF COMMENTS (BRC*) *For comments pertaining to particular items, list code/associated comment.*

_____

_____

_____

MENTAL HEALTH CARE

FOLLOW-UP ENCOUNTER FORM

NHRC 6320-30.1C (05-84)

THIS SECTION TO BE COMPLETED BY THE TECHNICIAN. ANSWER EACH ITEM. PLEASE PRINT.

PATIENT NAME

LAST NAME _____ FIRST NAME _____ M.I. ___

SEX

☐ (M) Male ☐ (F) Female

DATE OF BIRTH

___ ___ / ___ ___ / ___ ___
MONTH DAY YEAR

DATE OF ENCOUNTER

___ ___ / ___ ___ / ___ ___
MONTH DAY YEAR

CLINICIAN No. 1

CODE: ___ ___ ___

CLINICIAN No. 2

CODE: ___ ___ ___

SITE CODE *Check only one.*

☐ (A) NAS North Island
☐ (B) Naval Station San Diego
☐ (C) Naval Training Center San Diego
☐ (D) NAS Miramar
☐ (E) San Diego Naval Hospital
☐ (O) Other

TYPE OF PRINCIPAL SERVICE PROVIDED *(Evaluation/Psychotherapy) Check only one.*

☐ (A) Suitability or fitness for duty
☐ (B) Special program screening
☐ (C) Psychometric testing
☐ (D) Fit for confinement
☐ (E) Medical Board
☐ (F) Sanity hearing
☐ (G) NAB or RAB
☐ (H) Individual therapy
☐ (I) Group therapy
☐ (J) Couple/family therapy
☐ (K) Relaxation therapy
☐ (L) Other screening
☐ (O) Other

VISIT CLASSIFICATION

☐ (1) Routine follow-up visit
☐ (2) Emergency follow-up visit

PRIMARY DIAGNOSIS

AXIS 1 - ___ ___ ___ . ___ ___ * **AXIS 2** - ___ ___ ___ . ___ ___ *

CODE: **COMMENTS:** _____

CODE: **COMMENTS:** _____

DISPOSITION *Check only one.* (DSP)

☐ (Q) Fit for full duty
☐ (R) Unsuitable
☐ (S) Unfit for duty
☐ (T) Limited duty
☐ (U) Deferred
☐ (V) Dependent - does not apply

COMMENTS: _____

RECOMMENDATION *Check ALL that apply.*

ALCR	☐ Alcohol rehabilitation	**CHM**	☐ CHAMPUS
DRGR	☐ Drug rehabilitation	**ADSEP**	☐ Administrative separation
CAAC	☐ CAAC	**MB**	☐ Medical Board
HSP	☐ Admit to hospital	**FSC**	☐ Family Service Center
OTX	☐ Return for outpatient treatment	**NFU**	☐ No follow-up indicated
FEVL	☐ Return for further evaluation	**RCO***	☐ Other: _____

CODE: **COMMENTS:** _____

CODE: **COMMENTS:** _____

BRIEF COMMENTS (BRC*) *For comments pertaining to particular items, list code/associated comment.*

_____

_____

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18. SUPPLEMENTARY NOTES

19. KEY WORDS *(Continue on reverse side if necessary and identify by block number)*

Mental Health Information System
Psychiatric
Automated
Computerized

20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

A comprehensive, automated Navy Mental Health Information System (NAMHIS) has been developed at the Naval Health Research Center for use in Navy outpatient mental health clinics. NAMHIS provides three major services. First, it is a medical recordkeeping system. Standardized clinical and administrative information from individual patient/clinician encounters are collected and stored in an automated medical record format. Easy access to these records is facilitated and timely reports of patient/clinician consultations are generated.

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Second, it serves as a management information system with monthly administrative reports and a readily available database to answer management related queries, and third, it provides a scientific database to support research queries and major investigative projects.

END

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